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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/755,703	01/05/01	BEAL	H 26006.00

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EXAMINER

THOMSON, M

ART UNIT	PAPER NUMBER
3641	

DATE MAILED: 07/05/01

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)
	09/755,703	BEAL, HAROLD F.
	Examiner	Art Unit
	Michelle (Shelley) Thomson	3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 05 January 2001.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-24 is/are pending in the application.

4a) Of the above claim(s) 15-24 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-14 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 05 January 2001 is/are objected to by the Examiner.

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) Notice of References Cited (PTO-892)

16) Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

18) Interview Summary (PTO-413) Paper No(s) _____.

19) Notice of Informal Patent Application (PTO-152)

20) Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-14, drawn to gun ammunition, classified in class 102, subclass 441.
 - II. Claims 15-23, drawn to a method of manufacturing gun ammunition, classified in class 86, subclass 12.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process as claimed can be used to make ammunition having a straight cylindrical case. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
3. During a telephone conversation with Paul Hodges on 6/27/01 a provisional election was made with traverse to prosecute the invention of group I, claims 1-14. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15-23 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "52" has been used to designate both "level" and "top surface". Correction is required.
5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the disc having a first central thickness and a second lesser thickness in the circumferential margin and the projectile tapered from a first and minimum diameter at its proximal end to a second and greater diameter adjacent the transition portion must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
8. Claims 10-13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In regards to claim 10 a fast burning gun powder is claimed. Applicant specifies in the disclosure that the gun powder is slow burning. Specifically page 8, line 24, page 12, lines 19 &20, page 13, line 20, and page 9, lines 7-9 which states "To

the contrary, the present inventor employs a gun powder which is industry rated as being a very slow burning powder." In regards to claim 11 a projectile having a first and minimum diameter at its proximal end and a second and greater diameter adjacent the transition of the body portion to the ogive portion is claimed. Applicant shows in Figures 1-3 that the proximal end of the projectile has a greater diameter than the ogive portion of the projectile and specifically discloses on page 15, lines 21 that the projectile ranged from between a diameter of 0.22420 and 0.22430 inches at the proximal end of the projectile to between about 0.22390 and 0.22400 at the transition of the body portion into the necked-down portion of the case. Accordingly the minimum diameter does not occur at the proximal end of the projectile.

9. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claim 1 recites the limitation "the gun" in line 2. There is insufficient antecedent basis for this limitation in the claim.

11. Claims 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claim 7 recites the limitation "said further disc" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1, 3 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Stiefel et al. (United States Patent # 3,706,278). Stiefel et al. discloses a round of ammunition. The ammunition comprising a projectile (reference 12) a cartridge (reference 10) having a body portion, a partially closed trailing end which houses a primer (reference 16), and a necked-down portion adjacent an open leading end (See Figure). The ammunition comprises a quantity of gun powder (references 20-24) incompletely filling the body portion. A disc (reference 26), which may be cotton (column 2, lines 56-58), located between a proximal end of the projectile and the powder. The powder is a combination of both a fast burning composition (column 2, lines 13-15) and a slower burner powder (column 2, lines 50-56). Stiefel et al. specifically discloses an embodiment pertaining to a 5.56-mm cartridge.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 2, 4, 7-9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stiefel et al. as applied to claims 1 and 3 above, and further in view of Arter (United States Patent # 2,440,568). Although Stiefel et al. does not specifically disclose a second disc and the disc comprised of paper stock, Arter does. Arter teaches a firearm ammunition having multiple disc inserted between the projectile and gun powder of a cartridge (Figure 2). One disc is paper

(reference 22) and the other is felt wadding (reference 23) the two discs are disposed contiguously. Arter also discloses an embodiment having a separator between the disc and projectile (Figure 4). Stiefel et al. and Arter are analogous art because they are from the same field of endeavor: firearm ammunition. Therefor, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the multiple discs of Arter with the ammunition of Stiefel et al. The suggestion/motivation for doing so would have been to obtain a cartridge having better control of the propelling gases and therefore reducing breech pressures. Stiefel et al. and Arter disclose the claimed invention except for the weight of the disc being between 0.10 and 0.16 grains. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the disc weigh between 0.10 and 0.16 grains, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

17. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steiler et al. and Arter as applied to claims 1-4 above, and further in view of Gardner (United States Patent # 5,471,931). Although neither Steiler et al. nor Arter disclose the disc having a thicker center, Gardner does. Gardner teaches ammunition having a wad (disc) disposed between the projectile and gun powder, the wad has a central domed disk portion which terminates at the rim (Figure 2, reference 28). Steiler et al., Arter, and Gardner are analogous art because they are from the same field of endeavor: firearm ammunition. Therefor, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the dome shape of Gardner with the ammunition of Steiler et al. and Arter. The suggestion/motivation for doing so would have been to obtain ammunition that protects the powder from moisture. Steiler et al., Arter, and

Gardner disclose the claimed invention except for the disc having a central thickness of 0.14 inch and the edges having a thickness of 0.10 inches. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the disc having central thickness of 0.14 inch and the edges having a thickness of 0.10 inches, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brofelth (United States Patent # 1,899,925), Moore (United States Patent # 5,171,934), Beal (United States Patent # 5,822,904), Gardner et al. (United States Patent # 5,031,541) and Lawrence (United States Patent # 4,644,865).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle (Shelley) Thomson whose telephone number is 703.306.4176. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703.306.4198. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.7687 for regular communications and 703.305.7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.1113.

mrt
June 29, 2001

Charles T. Jordan
CHARLES T. JORDAN
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